

REMARKS

Applicant thanks the Patent Office for acknowledging Applicant's claim to foreign priority, and for indicating that the certified copy of the priority document, Japanese Patent Application No. 2001-009024 dated January 17, 2001, has been made of record in the file.

Claims 1-7 have been examined on their merits.

Applicants herein amend claims 1, 6 and 7 to recite that the straight line passes through at least one vertex of at least one polygon of the combination of polygons that comprise an image.

Claims 1-7 are all the claims presently pending in the application.

1. Claims 1-7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dermer (U.S. Patent No. 5,668,931) in view of Ishida (U.S. Patent No. 6,456,283). Applicant traverses the rejection of claims 1-7 for at least the reasons discussed below.

The Patent Office acknowledges that Dermer is not specific to the dividing of an image into a plurality of image areas by using a straight line passing through vertices of the polygons and their respective boundaries. *See* December 27, 2004 Office Action, pg. 3. The Patent Office alleges that Ishida supplies the necessary disclosure to overcome the acknowledged deficiencies of Dermer.

The combination of Dermer and Ishida fails to teach or suggest the dividing of an image (composed of polygons) into a plurality of image areas by at least one straight line passing through a polygon vertex such that the image areas are formed by the straight line and the boundaries of a divided polygon, as recited in claim 1. As noted in the Rule 116 Amendment

filed on October 13, 2004 and as acknowledged by the Patent Office, Dermer does not teach or suggest dividing an image comprised of polygons into a plurality of image areas.¹ For example, Figure 7a (cited by the Patent Office) illustrates lines A, B, C, D, E, F, G and H passing through the vertices of the polygons “abcd” and “efgh”. However, nowhere in Dermer is there any teaching or suggestion that the polygons “abcd” and “efgh” are divided into smaller areas based on the lines A, B, C, D, E, F, G and H. For example, Dermer does not define an image area comprising the polygon boundaries “ab” and “ad” and the line B.

The combination of Dermer with Ishida fails to teach or suggest the image area designation as recited in claim 1. The portion of Ishida cited by the Patent Office describes the division of an image comprised of polygons by using a “picture frame” that is divided into blocks and is overlaid over a polygon that is part of the image. *See, e.g.*, Figures 5 and 7, col. 9, lines 3-12; col. 9, line 43 to col. 10, line 5 of Ishida. Both Figures 5 and 7 of Ishida are clear that the lines of the picture plane (D) are overlaid on to the polygon primitives (P), and one of skill in the art would understand that none of the overlaid lines originates or passes through at a vertex of the polygon. While admittedly Ishida discloses the division of a polygon into discrete blocks, the combination of Dermer and Ishida still fails to teach or suggest that an image composed of polygons is decomposed into a plurality of smaller image areas, wherein the image areas are designated by a straight line passing through at least one polygon vertex and the boundaries of

¹ Dermer discloses rearranging the boundaries of the shapes comprising the image. Division of the image into a plurality of image areas is not performed. For example, color regions 210 and 220 are simply remapped into the color regions 210 and 220 shown in Figure 14a or 14b of Dermer.

the divided polygons. As discussed previously, Dermer lacks any teaching or suggestion of the division of an image into discrete image areas based on straight lines intersecting vertices and polygon boundaries, and Ishida fails to teach or suggest at least this feature of claim 1 as well. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness, as required by *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991).

Applicant further submits that one of skill in the art would not be motivated to combine the two references. Since Ishida is directed to the generation of three-dimensional CG, it belongs to a different technical area than that of the present invention and Dermer. Thus, there are no grounds for combining Dermer and Ishida, regardless of the technique disclosed in Ishida. Furthermore, even if it was possible to combine those two techniques, Ishida fails to teach or suggest dividing an image by passing a straight line through at least one polygon vertex. As shown in Figures 5 and 6 of Ishida, a straight line that divides the image D does not pass through vertices of the polygons P.

Although the Patent Office provides a motivation analysis with respect to dividing an image to speedily generate an image, both Dermer and Ishida lack any teaching or suggestion about the desirability of dividing of an image (composed of polygons) into a plurality of image areas by at least one straight line passing through at least one polygon vertex such that the image areas are formed by the straight line and the boundaries of a divided polygon. Thus, Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness, as required by *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) and *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001).

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLICATION NO. 10/000,065
ATTORNEY DOCKET NO. Q67493

Based on the foregoing reasons, Applicant submits that the combination of Dermer and Ishida fails to teach or suggest all of the claimed elements as arranged in claim 1. Thus, Applicant submits that claim 1 is allowable, and further submits that claims 2-5 are allowable as well, at least by virtue of their dependency from claim 1. Applicant respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 1-5.

With respect to claims 6 and 7, Applicant submits that claims 6 and 7 are allowable for at least the same reasons discussed above with respect to claim 1, in that the combination of Dermer and Ishida fails to teach or suggest dividing of an image (composed of polygons) into a plurality of image areas by at least one straight line that passed through a polygon vertex such that the image areas are formed by the straight line and the boundaries of a divided polygon. Thus, Applicant submits that claims 6 and 7 are allowable, and respectfully requests that the Patent Office withdraw the § 103(a) rejection of claims 6 and 7.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLICATION NO. 10/000,065
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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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